



Bureau of Safety and Environmental Enforcement

BSEE Update

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NOSAC Meeting – Sept 11, 2018

"To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement."

Outline

- BSEE by the Numbers
- BSEE Safety Alerts, Safety Bulletins and Panel Investigations
- BSEE Rules
- Bolt Efforts and Research

BSEE by the Numbers

- In 2017, BSEE staff completed over 19,000 inspections on the OCS
- As of June 2018, there were 43 rigs working in the US GOM, including 18 drillship, 5 semi-submersible rigs, 9 jackup rigs, and 11 platform rigs
- As of June 2018, BSEE engineers performed over 40 technical assessments of new and emerging technologies
- In 2017, BSEE staff completed 22 technology assessment research projects representing \$16.7 million in investment in reducing offshore risk.
- BSEE GOM region oversees nearly 1,993 facilities and more than 21,300 miles of active pipeline
- BSEE has approximately 830 employees

BSEE Safety Alerts, Bulletins and Investigations

2018 BSEE Safety Alerts:

<https://www.bsee.gov/guidance-and-regulations/guidance/safety-alerts>

- No. 340, "Caisson Well Surface Safety Valve Actuator Explodes," dated 8/23/2018
- No. 339, "Running of Gas Sensing Line in Cable Tray Leads to Fire," dated 8/03/2018
- No. 338, "Pressure Safety Element Rupture Disk Failures," dated 8/03/2018
- No. 337, "Fires Caused by Electronic Device Chargers," dated 8/03/2018
- No. 336, "Recurring Hand Injury Incidents on the OCS," dated 6/04/2018
- No. 335, "Failure to Mitigate Known Hazards Leads to Kick," dated 5/14/2018
- No. 334, "Benzene Level Exceeds Exposure Limit334 - Benzene Level Exceeds Exposure Limit," dated 5/11/2018
- No. 333, "Floating Production Platform Evacuated Amid Power Outage," dated 5/11/2018
- No. 332, "Crane Hazards Identified by BSEE in Risk Based Inspections," dated 5/10/2018
- No. 331, "Personnel Transfers by Swing Rope and Personnel Basket," dated 4/04/2018
- No. 330, "MSA® Gravity Welder Harnesses," dated 3/9/2018
- No. 329, "Potentially Catastrophic Crane and Lifting Incidents," dated 2/20/18
- No. 328, "Gas Release Hazards Identified by BSEE," dated 1/5/18

2018 BSEE Safety Bulletins:

<https://www.bsee.gov/guidance-and-regulations/guidance/safety-bulletins>

- No. 012, "Three Burn Injuries Due to External Heater Treater Fire," dated 8/30/2018
- No. 011, "Concerns with Epoxy Adhesives," dated 3/12/18
- No. 010, "Complacency in Aviation is Everyone's Challenge," dated 2/20/18

2018 BSEE Panel Investigation Report:

<https://www.bsee.gov/what-we-do/incident-investigations/offshore-incident-investigations>

- "Investigation of May 11, 2016, Shell Glider Subsea Jumper Leak, Lease OCS-G15565, Green Canyon Block 248 Subsea Well #4," dated 3/9/18
- "Investigation of Nov. 12, 2016, Fire at LLOG Exploration Offshore, L.L.C.'s Grand Isle Block 115 "A" Platform in the Gulf of Mexico," dated 8/30/2018

BSEE Rulemaking

- Production Safety Systems Final Rule – BSEE has revised the draft final rule considering public comments received during the open comment period. The draft final rule is in the final stages of review and is expected to be completed and sent to the Federal Register within the next few weeks.
- Well Control and Blowout Preventer (WCR) Proposed Rule – The comment period for this proposed rule ended on August 6, 2018. BSEE received well over 100,000 comments (most of which are form letters). BSEE is in the early stages of reviewing the comments and preparing responses for a final rule; expected to be published in early 2019.
- Arctic Exploratory Drilling Proposed Rule – BSEE and BOEM are in the early stages of preparing to develop a joint proposed rule to revise the 2016 final rule, subject to Tribal consultations with representatives of Alaska Native communities and organizations. BSEE/BOEM expect to publish a proposed rule in early 2019.

API and Industry Bolt Efforts

- Meets with BSEE quarterly
 - <https://www.bsee.gov/what-we-do/offshore-regulatory-programs/emerging-technologies/bolt-and-connector-failures#correspondence>
- Bolt and Quality Standards
 - Updating standards to add new requirements for management of sub-tier subcontracted vendors
 - Bolting Standards: API 20E, 20F, and 20M
 - Quality Standards: API Q1, Q2, and 18LCM.
 - Updating relevant subsea critical equipment standards (API 6A, 16A, etc.) to incorporate API 20E and 20F updates.
- Research
 - Conduct research on perspective alternative materials and coatings to determine their susceptibility to environmental hydrogen embrittlement failures.
- Bolt Replacement
 - As of May 2018, 94% of API 20E compliant bolts were replaced on subsea critical equipment operating on the OCS.

Bolt Research

● National Academies of Science, Engineering, and Medicine (NASEM)

- NASEM recently published the bolt follow-on study final report with recommendations on NASEM's website (June 12, 2018)
- NAS High-Performance Bolting Technology for Offshore Oil and Natural Gas Operations
 - <https://www.nap.edu/catalog/25032/high-performance-bolting-technology-for-offshore-oil-and-natural-gas-operations>

● QC-FIT

- Completed 3 Bolt Technical Evaluations
- Published 3 Bolt reports on BSEE's website
 - <https://www.bsee.gov/ge-bolt-report-final>
 - <https://www.bsee.gov/sites/bsee.gov/files/memos/public-engagement/qc-fit-bp-bolts-report-final.pdf>
 - <https://www.bsee.gov/sites/bsee.gov/files/qc-fit-nov-bop-bsr-bolt-report-7282017.pdf>

● Interagency Bolt Action Team (IBAT)

- BSEE convened the first Interagency Bolt Action Team (IBAT) in September 2016 to foster collaboration with other industries experiencing similar fastener failures
- The IBAT comprises multiple federal agency partners
- IBAT focuses on information sharing and identifying solutions and best practices to improve subsea critical equipment bolt performance.
- <https://www.bsee.gov/what-we-do/offshore-regulatory-programs/emerging-technologies/systems-reliability-section/interagency-bolt-action-team-ibat>

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